pounds. The author regards a crystalline structure as racemic if it is composed of equal numbers of dextrorotatory and lævorotatory molecules. The optical activity is only an accessory phenomenon depending on the nature of the molecules of each configuration, and is zero in the particular case of simple enantiomorphs.—J. **de Lapparent**: The episodic character of the layers of carboniferous limestone in the Boulonnais and the dolomitisation of certain of them.—S. **Stefanescu**: Some morphological characters of the crown of the molars of mastodons and elephants.—R. **Souèges**: The embryogeny of the labiates. The development of the embryo in *Mentha viridis*.—A. **Goris** and C. **Vischniac**: The alkaloids of valerian. The authors' results confirm those of Waliszewski and Chevalier. Valerian root contains two alkaloids, chatinine (soluble in ether) and valerine (insoluble in ether, but soluble in chloroform). The proportions found in the root are very small, and, as their physiological action is slight, these substances probably have no bearing on the therapeutic action of the valerian.—J. **Politis**: The mitochondrial origin of the anthocyanic pigments in fruits.—E. **Licent**: The structure and evolution of the nucleus in the meristem cells of some Euphorbiaceæ.—R. **de Litardière**: Remarks on the chromosomic processes in the diploidic nuclei of *Podophyllum peltatum*. The author's observations on the evolution of the somatic chromosomes of *P. peltatum*, given in detail, are not in accord with those of Overton.—A. **Desgrez** and H. **Bierry**: Food rations and vitamins.—A. **Lumière**: Surface tension and the anaphylactic shock: Reply to the criticisms of W. Kopaczewski.—A. **Vandel**: The regeneration of the genital glands in Planaria.—A. **Labbé**: The adaptive modifications of *Dunaliella salina*.—A. **Magnan**: The variation in weight of the lowering and lifting muscles according to the extent of the wing-surface in birds.—S. and A. **Mayer**: The fundamental organic substance of amylopectin. The amylopectin was separated by electrodialysis from a starch solution. Its chemical and physical properties are compared with those of the amylose solution obtained in the process of preparation.—E. **Roux**: Some remarks on the action of light and heat radiations in heliotherapy.

Books Received.

Coke-Oven and By-Product Works Chemistry. By Thos. B. Smith. Pp. x+180+7 plates. (London: C. Griffin and Co., Ltd.) 21*s.*

The Clayworker's Hand-book. By Alfred B. Searle. Third edition, revised. Pp. viii+381. (London: C. Griffin and Co., Ltd.) 21*s.*

The Way of a Trout with a Fly, and Some Further Studies in Minor Tactics. By G. E. M. Skues. Pp. xvi+259. (London: A. and C. Black, Ltd.) 18*s.* net.

Tables of Refractive Indices. By R. Kanthack. Vol. ii.: Oils, Fats, and Waxes. Pp. 295. (London: Adam Hilger, Ltd.) 25*s.* net.

Atlas Météorologique de Paris. By Joseph Lévine. Pp. vi+83+ix plates. (Paris: Gauthier-Villars et Cie.) 20 francs.

Principles and Methods of Physical Anthropology. By Rai Bahadur S. C. Roy. (Patna University Readership Lectures, 1920.) Pp. xiii+181. (Patna: Government Printing Office.) 5 rupees.

The Psychology of Everyday Life. By Dr. James Drever. Pp. ix+164. (London: Methuen and Co., Ltd.) 6*s.* net.

Handbook of Instructions for Collectors. Fourth edition. Pp. 222. (London: British Museum (Natural History).) 5*s.*

A Handbook of the British Lichens. By Annie L. Smith. Pp. vii+158. (London: British Museum (Natural History).) 6*s.* 6*d.*

Calculus for Beginners: A Text Book for Schools and Evening Classes. By H. Sydney Jones. Pp. ix+300. (London: Macmillan and Co., Ltd.) 6*s.*

Cotton Spinning. By W. S. Taggart. Vol. ii. Sixth edition, with Appendix. Pp. xv+291. (London: Macmillan and Co., Ltd.) 8*s.* 6*d.* net.

Eminent Chemists of our Time. By Dr. Benjamin Harrow. Pp. xvi+248. (London: T. Fisher Unwin, Ltd.) 9*s.* net.

Some Birds of the Countryside: The Art of Nature. By H. J. Massingham. Pp. 208. (London: T. Fisher Unwin, Ltd.) 12*s.* 6*d.* net.

Smithsonian Institution: United States National Museum. Report on the Progress and Condition of the United States National Museum for the Year ending June 30, 1920. Pp. 210+3 plates. (Washington: Government Printing Office.)

Annual Report of the Director, United States Coast and Geodetic Survey, to the Secretary of Commerce for the Fiscal Year ended June 30, 1920. Pp. 173. (Washington: Government Printing Office.)

Fermat's Last Theorem: Proofs by Elementary Algebra. By M. Cashmore. Third edition. Pp. 67. (London: G. Bell and Sons, Ltd.) 2*s.* 6*d.* net.

Fisheries: England and Wales. Ministry of Agriculture and Fisheries: Fishery Investigations. Series iii., Hydrography. Vol. i., The English Channel. Part vi., Across the Mouth of the Channel. Pp. iii+32. (London: H.M. Stationery Office.) 5*s.* net.

Official Statistics: What they Contain and How to Use Them. By Prof. A. L. Bowley. (The World of To-Day.) Pp. 63. (London: Oxford University Press.) 2*s.* 6*d.*

The Moral and Social Significance of the Conception of Personality. By the late Arthur G. Heath. Pp. viii+159. (Oxford: Clarendon Press.) 7*s.* 6*d.* net.

Catalogue of the Fossil Bryozoa (Polyzoa) in the Department of Geology, British Museum (Natural History). The Cretaceous Bryozoa (Polyzoa). Vol. iii.: The Cribrimorphs. Part i. By Dr. W. D. Lang. Pp. 12+cx+269+viii plates. (London: British Museum (Natural History).) 30*s.*

A Book about the Bee. By Herbert Mace. Pp. x+138. (London: Hutchinson and Co.) 4*s.* net.

A Monograph of the Pheasants. (In four volumes.) By William Beebe. Vol. ii. Pp. xv+269+plates. (London: H. F. and G. Witherby.) 12*l.* 10*s.* net.

Activism. By Henry L. Eno. Pp. viii+208. (Princeton: University Press; London: Oxford University Press.) 6*s.* 6*d.* net.

Introduction to General Chemistry: An Exposition of the Principles of Modern Chemistry. By Prof. H. Copaux. Translated by Dr. Henry Leffmann. Pp. x+195. (Philadelphia: P. Blakiston's Son and Co.) 2.00 dollars net.

Diary of Societies.

THURSDAY, MAY 19.

ROYAL INSTITUTION OF GREAT BRITAIN, at 3.—E. Law: The Architecture and Art of Hampton Court Palace: I. In Tudor Times.

INSTITUTE OF PATHOLOGY AND RESEARCH (at St. Mary's Hospital, Paddington), at 4.30.—Dr. H. H. Dale: Anaphylaxis and Immunity.

ROYAL INSTITUTE OF BRITISH ARCHITECTS, at 5.—R. E. Fry: Architectural Heresies of a Painter.

ROYAL SOCIETY OF MEDICINE (Dermatology Section) (Annual General Meeting), at 5.

INSTITUTION OF MINING AND METALLURGY (at Geological Society), at 5.30.—E. H. Clifford: Scheme for Working the City Deep Mine at a Depth of 7000 ft.—The following Papers will be submitted for Discussion:—F. P. Caddy: Stope Measuring at the Passagem Mine of the Gold Mines of Ouro Preto, Ltd.—J. A. P. Gibb: Notes on Some Useful Alignment Charts.

CHEMICAL SOCIETY (Informal Meeting), at 8.

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Röntgen Society (in Physics Lecture Theatre, University College), at 8.15.—Prof. A. V. Hill: Electrical Instruments and Phenomena in Physiology (Fourth Silvanus Thompson Memorial Lecture).

FRIDAY, May 20.

Royal Society of Medicine (Otology Section) (Annual General Meeting), at 5.—F. J. Cleminson: Sinusitis in Children.

Junior Institution of Engineers, at 8.—A. Arnold: Liquid Fuels.

Royal Society of Tropical Medicine and Hygiene (at 11 Chandos Street, W.1), at 8.15.—Lt.-Col. H. Kirkpatrick: Trachoma.—C. H. Marshall: New Method of Treatment of Human Trypanosomiasis.—C. França: An Early Portuguese Contribution to Tropical Medicine.

Royal Society of Medicine (Electro-Therapeutics Section) (Annual General Meeting), at 8.30.—Discussion: The Stomach.

Royal Institution of Great Britain, at 9.—Prof. E. H. Starling: The Law of the Heart.

SATURDAY, May 21.

Royal Institution of Great Britain, at 3.—F. Legge: Gnosticism and the Science of Religions. I.

MONDAY, May 23.

Victoria Institute (at the Central Hall, Westminster), at 4.30.—Rev. Dr. W. St. Clair Tisdall: The Date of Daniel.

Institution of Electrical Engineers (Informal Meeting) (at Chartered Institute of Patent Agents), at 7.

Royal Institute of British Architects, at 8.

Aristotelian Society (at University of London Club), at 8.—Very Rev. Dean Rashdall and Others: Discussion on Dr. Inge's "The Idea of Progress."

Medical Society of London (at 11 Chandos Street, W.1), at 8.—General Meeting.

Royal Society of Medicine (Odontology Section) (Annual Meeting), at 8.—J. H. Mummery and G. J. Harborow: A Composite Odontome.—A. T. Pitts: The Prophylactic Extraction of the Third Molars.

Royal Geographical Society (at Æolian Hall), at 8.30.—Mrs. Rosita Forbes: Across the Libyan Desert to Kufara.

Medical Society of London (at 11 Chandos Street, W.1), at 9.—Lord Dawson of Penn: The Colon and Colitis (Annual Oration).

TUESDAY, May 24.

Institution of Gas Engineers (at Institution of Civil Engineers), at 10 a.m.

Royal Horticultural Society (at Chelsea), at 3.

Royal Institution of Great Britain, at 3.—E. Clodd: Occultism: Its Origin and Development.

Linnean Society, at 3.—Anniversary Meeting.

Royal Statistical Society (at Surveyors' Institution), at 5.15.—G. Udny Yule: The Time-correlation Problem, with Especial Reference to the Variate-difference Method.

Royal Society of Medicine (Medicine Section) (Annual General Meeting), at 5.30.—Dr. C. Riviere and Others: Discussion on Artificial Pneumothorax.

Zoological Society of London, at 5.30.—The Secretary: Report on the Additions to the Society's Menagerie during the month of April, 1921.—Dr. C. F. Sonntag: The Comparative Anatomy of the Tongues of the Mammalia. IV. Families 3 and 4. Cebidæ and Hapalidæ.—R. Broom: Some New Genera and Species of Anomodont Reptiles from the Karroo Beds of South Africa.—R. I. Pocock: The External Characters of some Species of Lutrinæ (Otters).—Dr. C. W. Andrews: Note on the Skull of *Dinotherium giganteum* in the British Museum.

Royal Photographic Society of Great Britain, at 7.—(Technical Meeting.) Scientific Aspects of Studio Lighting.—L. Gaster: The Selection and Use of Illuminants for the Studio.—J. C. Elvy: Illumination Problems in Kinematography.—J. W. P. Walsh and H. Buckley: Methods of Light Distribution.—I. G. Priest: A Possible Standard of White Light.

WEDNESDAY, May 25.

Institution of Gas Engineers (at Institution of Civil Engineers), at 10 a.m.

Royal Horticultural Society (at Chelsea), at 3.

Geological Society of London, at 5.30.—G. W. Lamplugh: The Junction of Gault and Lower Greensand near Leighton Buzzard (Bedfordshire).

Institution of Electrical Engineers (Wireless Section) (at Institution of Mechanical Engineers), at 6.—C. F. Elwell and Others: Discussion on Long-Distance Wireless Transmission.

Royal Microscopical Society (Leather Industries Section), at 7.30.—P. Hampshire: "Run" Pelts in Sweating Process of Dewoolling.

Royal Society of Arts, at 8.—Dr. C. M. Wilson: The War and Industrial Peace: An Analysis of Industrial Unrest.

THURSDAY, May 26.

Institution of Gas Engineers (at Institution of Civil Engineers), at 10 a.m.

Royal Horticultural Society (at Chelsea), at 3.

Royal Institution of Great Britain, at 3.—E. Law: The Architecture and Art of Hampton Court Palace. II. In Stuart and Later Times.

Royal Society, at 4.30.—*Probable Papers.*—Sir Alfred Ewing: The Atomic Process in Ferro-magnetic Induction.—C. D. Ellis: The Magnetic Spectrum of the β-rays excited by the γ-rays.—S. Datta: The Spectra of the Alkaline Earth Fluorides and their Relation to Each Other.—Dr. W. L. Balls: A Simple Apparatus for Approximate Harmonic Analysis and for Periodicity Measurements.—Dr. G. R. Goldsbrough: The Influence of Satellites upon the Form of Saturn's Ring.—Dr. H. Jeffreys: Certain Geological Effects of the Cooling of the Earth.—T. Kikuchi: The Moving Striations in a Neon Tube (title only).

Institute of Pathology and Research (at St. Mary's Hospital, Paddington), at 4.30.—Dr. J. A. Murray: Aims and Progress of the Experimental Study of Cancer.

Institution of Electrical Engineers (at Institution of Civil Engineers), at 6.

Concrete Institute (Annual General Meeting), at 7.30.

FRIDAY, May 27.

Royal Society of Arts (Indian and Colonial Sections), at 4.30.—Sir Charles H. Bedford: Industrial (including Power) Alcohol.

Physical Society of London (at University College), at 5.—Th General Electric Co. (communicated by C. C. Paterson): Method for the Micro-analysis of Gases by the Use of the Piran Pressure Gauge.—H. Pealing: The Reflection of the K-ray Spectrum of Palladium from Fluorspar.—Sir W. H. Bragg: Th Intensity of X-rays reflected by the Diamond.—Exhibits o Crystal Models, and of Photographs by the Duc de Broglie o Cathode Ray Spectra attendant on the production of X-rays.

Institution of Mechanical Engineers, at 6.—J. G. Graves: The World's Money System.

Royal Institution of Great Britain, at 9.—A. Mallock: Elasticity.

SATURDAY, May 28.

Royal Institution of Great Britain, at 3.—F. Legge: Gnosticism and the Science of Religions. II.

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